

CHAPTER 1 – INTRODUCTION

1.1 PURPOSE AND NEED

The Bureau of Land Management (BLM) has prepared this Resource Management Plan Amendment (RMPA) and Environmental Impact Statement (EIS) to address Federal fluid minerals (oil, gas, and geothermal) leasing and development in Sierra and Otero Counties (Map 1-1), formerly the White Sands Resource Area. The RMPA will amend the 1986 Resource Management Plan (RMP) for the White Sands Resource Area.

The Minerals Leasing Act of 1920, as amended, provides the Secretary of the Interior with authority to issue leases on lands where the mineral rights are held by the Federal government. This authority has been delegated to the BLM State Director. As of 1992, BLM is required to determine (1) which lands overlying Federal fluid minerals are suitable and available for leasing and subsequent development and (2) how those leased lands will be managed. Such determinations are required in every RMP prepared by BLM.

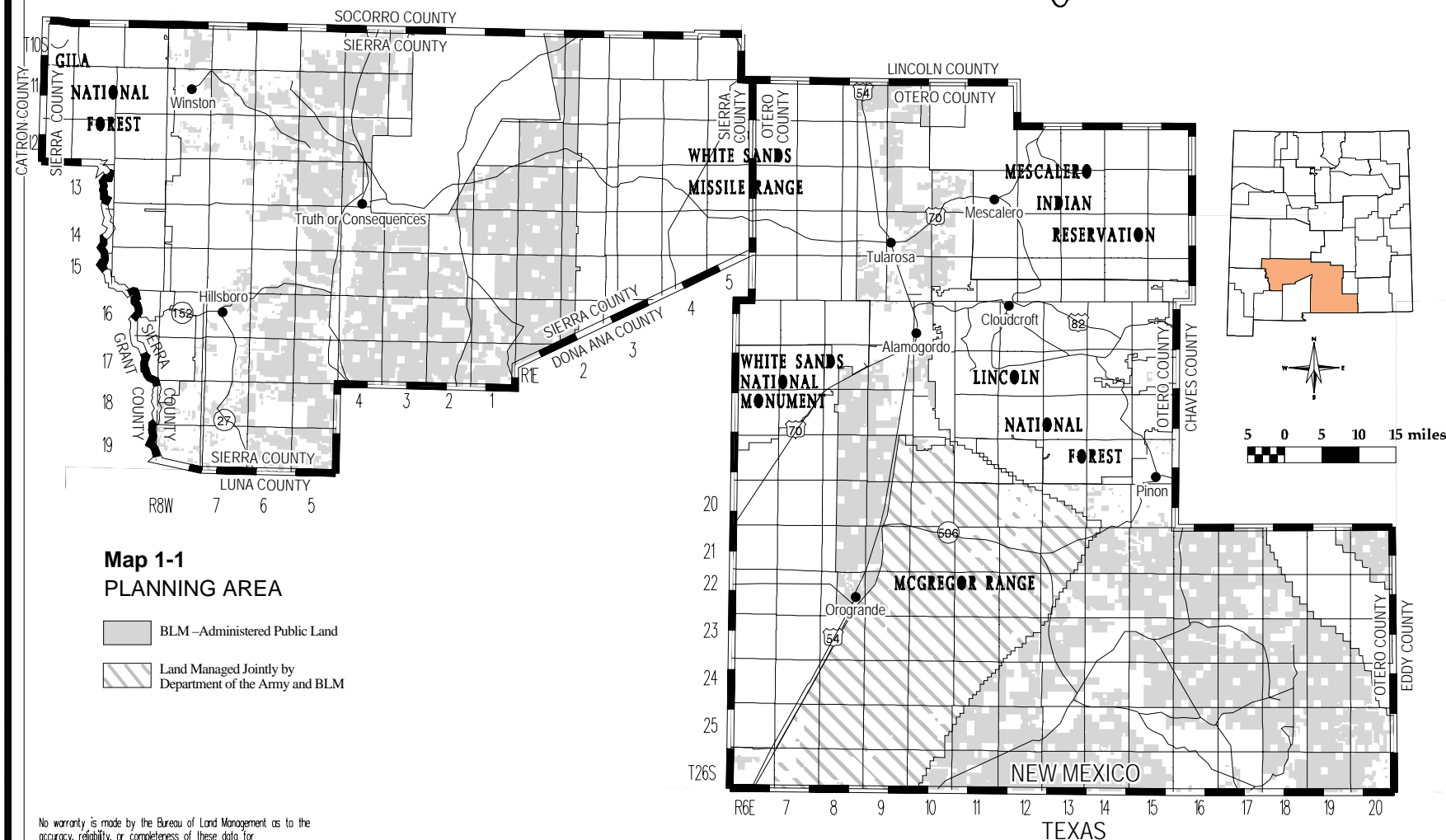
Although fluid minerals exploration has occurred in Sierra and Otero Counties, extensive development has not resulted. Oil and gas exploration has occurred within the Sierra and Otero Counties since at least 1925, when the first well was drilled in Otero County. To date, 98 wells have been drilled in the Planning Area, of which 74 are on Federal leases. Shows of oil or gas were reported for 21 of the wells on Federal leases. However, extensive field development has not resulted. Geothermal exploration also has occurred within Sierra and Otero Counties, often in conjunction with military or university (New Mexico State University) efforts to locate geothermal resources. Geothermal resources have been used in localized areas for space and swimming pool heating, particularly in the vicinity of Truth or Consequences.

In 1998, a gas find in Otero Mesa resulted in increased interest on the part of the oil and gas industry. Large increases in the number of lease nominations on public land prompted the BLM to review the 1986 RMP with regard to guidelines for fluid minerals leasing and development. Given the lack of direction in the existing 1986 RMP and the increasing level of interest in exploration, it was determined that an amendment to the 1986 RMP is required to guide leasing decisions on public land in order to comply with the 1992 supplemental guidelines described above (BLM Handbook H1624-1).

The BLM has issued mineral leases prior to the issuance of this document under existing RMP management policy, guidance, and decisions. However, the BLM deferred any new leasing pending completion of the RMPA/EIS. Lessees were given the option of voluntarily suspending existing leases for the duration of the RMPA/EIS process.



U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT
LAS CRUCES FIELD OFFICE

RMPA/EIS for Federal Fluid Minerals Leasing and Development in Sierra and Otero Counties

The result of the BLM planning process will be an RMPA that identifies which lands under BLM jurisdiction in Sierra and Otero Counties should be made available for development through leasing and what requirements, or stipulations, are needed to manage those lands and protect other resource values. Stipulations that will be attached to Federal fluid mineral leases may include controlled surface use, timing limitations, or no surface occupancy. The document also will identify the circumstances necessary for granting waivers, exceptions, or modifications to stipulations. Preparation of the RMPA is guided by BLM planning regulations (43 CFR 1600-1610) issued under the authority of the Federal Land Policy and Management Act of 1976 and by BLM Handbook H-1624-1 (Planning for Fluid Minerals Resources), and associated regulations.

The EIS will identify the potential impacts that alternatives for fluid minerals leasing and subsequent activities could have on the environment and identify appropriate measures to mitigate those impacts. The primary purpose is to analyze and document the direct, indirect, and cumulative impacts of reasonably foreseeable future actions resulting from Federally authorized fluid minerals activities. By law, these impacts must be analyzed before an agency makes an irreversible commitment of resources. In the fluid minerals program, this commitment occurs at the point of lease issuance (BLM Handbook H-1624-1 I.B.2.). The EIS prepared with the RMPA is intended to satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), and other associated regulations.

This RMPA/EIS, prepared to meet current requirements of the Federal fluid minerals program, is not the final review upon which approval of all proposed actions in the Sierra and Otero Counties will be based. Rather, the RMPA will identify lands within BLM's jurisdiction that are available for leasing and how those leased lands will be managed. Decisions on all subsequent site-specific actions will be tiered from this RMPA/EIS. That is, further environmental analyses and additional NEPA compliance will be required; however, the scope of the site-specific approval process will be streamlined and facilitated by the planning and programmatic evaluation of impacts accomplished in the RMPA/EIS.

1.2 LOCATION

Sierra and Otero Counties are located in south-central New Mexico. The two counties are addressed in their entirety throughout this document, regardless of jurisdiction or ownership. This two-county area is referred to in this document as the Planning Area. Of the approximately 7 million acres of Federal, State, Tribal, and private lands in Sierra and Otero Counties, BLM administers approximately 1.8 million surface acres and 5 million acres of Federal fluid mineral (subsurface) estate. The latter is the area within which BLM is mandated and has the authority to approve leases (including private- or State-owned surface acreage overlying Federally owned minerals [referred to as split estate]). The BLM considers potential impacts on all resources in the Planning Area regardless of surface ownership or management, and makes decisions on Federal fluid mineral leases in consultation with those other

surface owners and managers. Public land and private split-estate lands are referred to in this document as BLM's Decision Area and includes approximately 2,058,099 acres.

1.3 PLANNING PROCESS FOR THE RMPA/EIS

The RMPA process employs the nine basic steps of the BLM planning process, which are listed below and described in the planning regulations (Manual 1617, Section .42):

- # identification of issues
- # development of planning criteria
- # data and information collection
- # management situation analysis
- # formulation of alternatives
- # estimation of effects of the alternatives
- # selection of the preferred alternative(s)
- # selection of the plan amendment
- # monitoring and evaluation

The process requires the use of an interdisciplinary team of resource specialists to complete each step.

1.3.1 Step 1 – Identification of Issues

Issues were identified through the scoping process at the beginning of the project. Scoping, and the RMPA/EIS process, began with the publication in the *Federal Register* of the Notice of Intent (NOI) to amend the RMP, prepare an EIS, and conduct public scoping meetings. The NOI was published on October 15, 1998. In addition to the NOI, BLM prepared a scoping notice to send to approximately 700 agencies, interested organizations, and individuals in early October 1998. Also, a media release introducing the project and announcing the scoping meetings was prepared and issued on October 21, 1998 by the BLM to local and regional newspapers, television, and radio.

Three public scoping meetings were conducted by the BLM in early November 1998 (see Chapter 5, Section 5.4). A total of 36 people attended the three meetings and 102 oral comments were received. In addition to the comments received during the meetings, a total of 36 comment forms and letters were submitted to the BLM. Scoping ended on November 16, 1998; however, additional comments were accepted after that date.

All of the comments and questions received were compiled, reviewed, and analyzed to identify the issues to be addressed in the RMPA/EIS. Comments primarily addressed the RMPA/EIS process;

leasing; exploration, development, and production; lands and access; resources other than fluid minerals; socioeconomics; mitigation and reclamation; and operations and maintenance. The scoping process, including a summary of comments and issues, was documented in a Scoping Summary Report in January 1999 and sent to the interested parties on the mailing list. A complete record of scoping is on file at the BLM Las Cruces Field Office. The comments and issues, and where they are addressed in this document, are summarized in Table 1-1.

**TABLE 1-1
ISSUES IDENTIFIED THROUGH THE SCOPING PROCESS**

Issue	Section(s) is RMPA/EIS Where Issue is Addressed
Justify the need for this process and leasing deferment.	Chapter 1, Section 1.1
Provide adequate time for public review and response.	Chapter 1, Section 1.3.8
Consider mitigative effects of leasing, management options, and new technology.	Chapter 4; Appendices A-III, A-V, B
Provide an objective set of rules and criteria for decision making.	Chapter 1, Section 1.3
Consider a range of alternatives including least restrictive, balanced, and no leasing.	Chapter 2, Sections 2.3 and 2.4
Specify how existing lease rights would be impacted by the RMPA.	Chapter 2, Section 2.3
What will be the potential damage to lands due to construction and maintenance of roads during development and production?	Chapter 4 Appendix B
What will be the impacts on the existing transportation system?	Chapter 3, Section 3.4.5; Chapter 4, Section 4.2.1
Review existing RMPs to ensure consistency.	References
Clarify split estate rules.	Chapter 2, Section 2.2.1
What is the potential for land subsidence due to extraction of fluid mineral resources?	Chapter 4, Section 4.2.2
Concern about impacts on resources (soil, vegetation, wildlife and habitats, desert grassland habitat fragmentation, rangeland, cultural sites, recreation, and visual setting).	Chapter 4 Appendix B
What will be done to protect the aquifers and water quality in general?	Chapter 3, Section 3.7; Chapter 4, Section 4.2.4
Exclude Wilderness Study Areas (WSAs) and other proposed wilderness from leasing.	Chapter 2, Section 2.3.2; Chapter 4, Section 4.2.15
Prohibit activities in areas of critical environmental concern (ACECs).	Chapter 2, Section 2.3.2; Chapter 4, Section 4.2.15
Examine the importance of fluid mineral production to local economies.	Chapter 3, Section 3.19; Chapter 4, Section 4.2.16
What are potential impacts on the growth of the area and property values?	Chapter 3, Section 3.19; Chapter 4, Section 4.2.16
How will affected land be rehabilitated and will funds be assured for reclamation measures?	Chapter 4; Appendices A-III, B

1.3.2 Step 2 - Development of Planning Criteria

The planning criteria to guide the development of the RMPA/EIS include the following:

- # comply with laws, executive orders, and regulations
- # provide orderly leasing and development of fluid minerals while holding environmental damage to as minimum as practical
- # provide for conservation of mineral resources
- # provide for the rehabilitation of affected land
- # minimize soil erosion
- # provide for the protection of water resources
- # provide for the protection and management of plant and animal special-status species
- # provide for the protection and management of wildlife and wildlife habitat\
- # provide for the protection of cultural and paleontological resources
- # provide for the availability of recreation opportunities
- # identify, protect, and enhance visual quality
- # maintain public health and safety
- # consider social and economic effects

1.3.3 Step 3 - Data and Information Collection

The majority of data and information was extracted and used from existing data on file at the BLM Las Cruces Field Office. Other data were obtained from relevant sources to update and/or supplement the BLM's data (see References). Data included published and unpublished reports, maps, and digital format (geographic information system). Resource concerns addressed include the following:

- | | |
|------------------------|----------------------------------|
| # lands and access | # special status species |
| # geology and minerals | # rangeland |
| # soils | # cultural resources |
| # water resources | # paleontological resources |
| # air quality | # recreation |
| # noise | # visual resources |
| # vegetation | # special management areas |
| # wildlife | # social and economic conditions |

As a part of this step, relevant geological data were compiled and reviewed to estimate the potential for oil and gas and geothermal resources in the Planning Area. This and other historical data served as the basis for estimating the fluid minerals development that is reasonably foreseeable over the planning period of the next 20 years.

1.3.4 Step 4 - Management Situation Analysis

The purpose of the Management Situation Analysis (MSA) is to conduct a deliberate assessment of the current situation as it relates to Federal fluid minerals. The documentation is a compilation of information appropriate and commensurate with the planning issues. The MSA provides a profile of the resource concerns in the Planning Area, description of the existing management situation as it pertains to Federal fluid minerals, and analysis of opportunities to modify the existing management situation. The MSA and accompanying resource maps are on file at the BLM Las Cruces Field Office.

1.3.5 Step 5 – Formulation of Alternatives

Three alternatives were examined. The alternatives were developed to respond to issues identified through scoping, explore alternatives to the existing management situation, comply with BLM's planning guidelines for fluid mineral resources (Handbook H-1624-1), and comply with the Federal Land Policy Management Act (FLPMA) requirement of managing for sustained yield and multiple use on public land.

The No-action Alternative is the existing management situation and assumes that existing management would continue; that is, compliance with laws and regulations, and existing management plans, policies, decisions would continue on a case-by-case basis. Two alternatives were developed that are modifications to existing management. Alternative A incorporates legislative or regulatory requirements and/or management objectives that otherwise would be achieved on a case-by-case basis under existing management. Alternative B accomplishes the same objective as Alternative A, but provides a relatively greater emphasis on resource protection by imposing more constraints on fluid minerals leasing and development. The selection of Alternatives A or B would allow subsequent site-specific decisions and analyses to be tiered from the RMPA/EIS, thereby expediting future compliance with NEPA and other legal and regulatory requirements. The existing management situation and alternatives are described further in Chapter 2

The No-action Alternative assumes that the existing management situation will continue. Compliance with laws and regulations would continue on a case-by-case basis. Alternatives A and B address existing legislative and regulatory requirements at a programmatic level, and/or place constraints if resource values are determined to be sufficiently high or protections are justified in the public interest. Decisions and analysis would be tiered from the RMPA/EIS, thereby expediting future NEPA analysis and other legal and regulatory requirements. Alternatives and the existing management situation are described further in Chapter 2.

1.3.6 Step 6 – Estimation of Effects of Alternatives

A scenario of the reasonable foreseeable development (RFD) of fluid minerals within the Planning Area was developed in order to estimate the extent of potential impacts for each alternative. The beneficial and adverse impacts resulting from each of the alternatives were identified and evaluated. Mitigation measures also were considered in evaluating impacts. The baseline information that describes the existing environment in the Planning Area is included in Chapter 3, and environmental consequences are discussed in Chapter 4. The RFD used in the impact assessment is described in Chapter 2 and Appendix A-IV.

1.3.7 Step 7 – Selection of the Preferred Alternative

Based on the information generated in Step 6, the Las Cruces Field Manager identified and recommended Alternative A as the preferred alternative to the BLM State Director. The Draft RMPA/EIS then was completed and distributed to the public for review and comment. BLM presently is at this step of the process.

1.3.8 Step 8 – Selection of the Plan Amendment

Based on the results of the public review of and comment on this Draft RMPA/EIS, the Las Cruces Field Manager will recommend and the BLM State Director will select an alternative or a combination of the alternatives to be the Proposed RMPA and publish it along with the Final EIS. A final decision will be made after a 60-day Governor's Consistency Review and a 30-day protest period. A Record of Decision (ROD) and Approved RMPA then will be published.

1.3.9 Step 9 – Monitoring and Evaluation

Once the RMPA has been approved, it will serve as management guidance for Federal fluid minerals actions for BLM's Decision Area. The applicable stipulations will be attached to leases, and management prescriptions will be applied to site-specific areas in issuing use authorizations, permits to drill, and mitigation needs.

Over time, BLM will monitor and evaluate actions, resource conditions, and trends to determine the effectiveness of the RMPA and to ensure that implementation of the RMPA is achieving the desired results. The RMPA will be kept current through minor maintenance, amendments, or revisions as demands on resources change, as the resources change, or as new information is acquired.

1.4 RELATIONSHIP TO BLM POLICIES, PLANS, AND PROGRAMS

This document has been prepared to reflect and be consistent with current laws, regulations, and supplemental program guidance (BLM Manual Section 1624.2) for fluid minerals leasing and provide the public the opportunity to review leasing decision making.

The 1986 *White Sands Resource Management Plan* set forth decisions that are considered and will be incorporated appropriately into the RMPA. Since 1986, two RMPAs have addressed specific areas within the Planning Area. Fluid minerals leasing and development were addressed in the McGregor Range RMPA/EIS (BLM 1990) and those decisions will be carried forward unchanged. The RMPA (BLM 1997) that created five new ACECs in the Planning Area and expanded an existing ACEC closed those areas to leasing; the decisions within that RMPA also will be carried forward unchanged.

WSAs are designated by the Federal government and managed in accordance with the Wilderness Management Policy (BLM 1981). Two WSAs are included in BLM's Decision Area that have not received formal Congressional designation; these areas are managed under the Interim Management Policy Guidelines for Land Under Wilderness Review (BLM 1979).